

NCR-19-7727



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

**D4434-9****Job Sheet 196423**

Part No: D4434-9

Job Qty: 10 pcs

19

DAS  
21  
9-89

Part Name: Bracket



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 6/12/19

Job Tracking No:

Due Date: 6/24/19

Created By: Lorin Baltac

Type: SOLD

Description:

Note: DWG REV C SHEETS 14,15 IPP Rev:A 12.01.24 AS PER DWG REV.A DD VERF:EC IPP Rev:B 12.03.06 per REV.B DD verified by:EC IPP REV:C 13.04.01 AS PER D4434 REV.C DD VERF:JLM

Ship Via:

**Bill of Materials****Job Routing**

| Op No | Operation           | Qty    | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off    |
|-------|---------------------|--------|------------|----------|-----------|---------|-----------------------|-----------|-------------|
|       |                     |        |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier | Lead Time |             |
| 100   | Waterjet - Flow - 1 | 10 pcs |            | 6/24/19  | 0.17      | 1.18    | Waterjet - Flow       |           | JRB 9/11/19 |
| 110   | QC 2                | 10 pcs |            | 6/24/19  | 0.00      | 0.00    | QC 2 - 1              |           |             |
|       |                     |        |            |          |           |         | QC 2 - 12             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 14             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 17             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 19             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 2              |           |             |
|       |                     |        |            |          |           |         | QC 2 - 20             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 22             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 23             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 25             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 32             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 33             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 35             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 39             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 4              |           |             |
|       |                     |        |            |          |           |         | QC 2 - 40             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 44             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 45             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 48             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 49             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 50             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 51             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 52             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 57             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 62             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 63             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 8              |           |             |
|       |                     |        |            |          |           |         | QC 2 - 66             |           |             |
|       |                     |        |            |          |           |         | QC 2 - 64             |           |             |

DART Aerospace Ltd.  
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CANADA  
TEL.: 1 613 632-5200  
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Container No: S212856

Part: D4434-9

Job No: 196423

Serial No/Batch: S212856

Revision:

Inspector:

Exp Date:

Instructions: Various STC's

Date: 09/11/19

P.T.O.

|                                |           |         |           |                             |                               |
|--------------------------------|-----------|---------|-----------|-----------------------------|-------------------------------|
| 120 QC 8                       | 10<br>pcs | 6/24/19 | 0.00 0.00 | QC 2 - 65                   |                               |
|                                |           |         |           | QC 2 - 5                    |                               |
|                                |           |         |           | QC 2 - 71                   |                               |
|                                |           |         |           | QC 2 - 73                   |                               |
|                                |           |         |           | QC 2 - 69                   | JRB 9/11/19                   |
|                                |           |         |           | QC 8 - 12                   |                               |
|                                |           |         |           | QC 8 - 14                   |                               |
|                                |           |         |           | QC 8 - 17                   |                               |
|                                |           |         |           | QC 8 - 20                   |                               |
|                                |           |         |           | QC 8 - 25                   |                               |
|                                |           |         |           | QC 8 - 3                    |                               |
|                                |           |         |           | QC 8 - 32                   |                               |
|                                |           |         |           | QC 8 - 33                   |                               |
|                                |           |         |           | QC 8 - 35                   |                               |
|                                |           |         |           | QC 8 - 39                   |                               |
|                                |           |         |           | QC 8 - 4                    |                               |
|                                |           |         |           | QC 8 - 44                   |                               |
|                                |           |         |           | QC 8 - 45                   |                               |
|                                |           |         |           | QC 8 - 49                   |                               |
|                                |           |         |           | QC 8 - 58                   |                               |
|                                |           |         |           | QC 8 - 8                    |                               |
|                                |           |         |           | QC 8 - 9                    |                               |
|                                |           |         |           | QC 8 - 68                   |                               |
|                                |           |         |           | QC 8 - 67                   |                               |
|                                |           |         |           | QC 8 - 1 (A)                |                               |
|                                |           |         |           | QC 8 - 47                   |                               |
|                                |           |         |           | QC 8 - 40                   | DAS<br>SEP 12 2019 40<br>9-89 |
|                                |           |         |           | QC 8 - 52                   |                               |
|                                |           |         |           | QC 8 - 23                   |                               |
|                                |           |         |           | QC 8 - 57                   |                               |
| 130 Small Fab - 2 - B4B        | 10<br>pcs | 6/24/19 | 0.00 0.64 | Small Fab - 1 - B4B         | DAS<br>58 SEP 12 2019<br>9-89 |
|                                |           |         |           | Small Fab - 2 - B4B         |                               |
|                                |           |         |           | Small Fab - 3 - B4B         |                               |
|                                |           |         |           | Small Fab - 4 - B4B         |                               |
|                                |           |         |           | Small Fab - 5 - B4B         |                               |
|                                |           |         |           | Small Fab - 6 - B4B         |                               |
|                                |           |         |           | Small Fab - 7 - B4B         |                               |
| 140 Small Fab - Brake NC - B4B | 10<br>pcs | 6/24/19 | 0.25 0.61 | Small Fab - Brake - 1 - B4B |                               |
|                                |           |         |           | Small Fab - Brake - 2 - B4B |                               |
|                                |           |         |           | Small Fab - Brake - 3 - B4B | DAS<br>30 SEP 30 2019<br>9-89 |
| 150 QC 5                       | 10<br>pcs | 6/24/19 | 0.00 0.00 | QC 5 - 10                   |                               |
|                                |           |         |           | QC 5 - 12                   |                               |
|                                |           |         |           | QC 5 - 17                   |                               |
|                                |           |         |           | QC 5 - 18                   |                               |
|                                |           |         |           | QC 5 - 19                   |                               |
|                                |           |         |           | QC 5 - 22                   |                               |
|                                |           |         |           | QC 5 - 24                   |                               |
|                                |           |         |           | QC 5 - 3                    |                               |
|                                |           |         |           | QC 5 - 43                   |                               |
|                                |           |         |           | QC 5 - 49                   |                               |
|                                |           |         |           | QC 5 - 51                   |                               |
|                                |           |         |           | QC 5 - 58                   |                               |
|                                |           |         |           | QC 5 - 68                   |                               |
|                                |           |         |           | QC 5 - 9                    |                               |
|                                |           |         |           | QC 5 - 50                   |                               |
|                                |           |         |           | QC 5 - 30                   |                               |
|                                |           |         |           | QC 5 - 40                   | DAS<br>SEP 30 2019 40<br>9-89 |

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|                                   |           |         |           |                           |  |
|-----------------------------------|-----------|---------|-----------|---------------------------|--|
| 160 Handfinish - 1-1 Chemical-B4B | 10<br>pcs | 6/24/19 | 0.00 0.48 | Handfinish - 1 - 1 - B4B  |  |
|                                   |           |         |           | Handfinish - 1 - 2 - B4B  |  |
|                                   |           |         |           | Handfinish - 1 - 3 - B4B  |  |
|                                   |           |         |           | Handfinish - 1 - 4 - B4B  |  |
|                                   |           |         |           | Handfinish - 1 - 5 - B4B  |  |
|                                   |           |         |           | Handfinish - 1 - 6 - B4B  |  |
|                                   |           |         |           | Handfinish - 1 - 7 - B4B  |  |
|                                   |           |         |           | Handfinish - 1 - 8 - B4B  |  |
|                                   |           |         |           | Handfinish - 1 - 9 - B4B  |  |
|                                   |           |         |           | Handfinish - 1 - 10 - B4B |  |
|                                   |           |         |           | Handfinish - 1 - 11 - B4B |  |
|                                   |           |         |           | Handfinish - 1 - 12 - B4B |  |
|                                   |           |         |           | Handfinish - 1 - 13 - B4B |  |
|                                   |           |         |           | Handfinish - 1 - 14 - B4B |  |
|                                   |           |         |           | Handfinish - 1 - 15 - B4B |  |
|                                   |           |         |           | Handfinish - 1 - 16 - B4B |  |
|                                   |           |         |           | Handfinish - 1 - 17 - B4B |  |
|                                   |           |         |           | Handfinish - 1 - 18 - B4B |  |
|                                   |           |         |           | Handfinish - 1 - 19 - B4B |  |
|                                   |           |         |           | Handfinish - 1 - 20 - B4B |  |
|                                   |           |         |           | Handfinish - 1 - 21 - B4B |  |
|                                   |           |         |           | Handfinish - 1 - 22 - B4B |  |
| 170 QC 7                          | 10<br>pcs | 6/24/19 | 0.00 0.00 | QC 7 - 10                 |  |
|                                   |           |         |           | QC 7 - 13                 |  |
|                                   |           |         |           | QC 7 - 14                 |  |
|                                   |           |         |           | QC 7 - 15                 |  |
|                                   |           |         |           | QC 7 - 17                 |  |
|                                   |           |         |           | QC 7 - 18                 |  |
|                                   |           |         |           | QC 7 - 19                 |  |
|                                   |           |         |           | QC 7 - 2                  |  |
|                                   |           |         |           | QC 7 - 28                 |  |
|                                   |           |         |           | QC 7 - 3                  |  |
|                                   |           |         |           | QC 7 - 30                 |  |
|                                   |           |         |           | QC 7 - 34                 |  |
|                                   |           |         |           | QC 7 - 36                 |  |
|                                   |           |         |           | QC 7 - 37                 |  |
|                                   |           |         |           | QC 7 - 41                 |  |
|                                   |           |         |           | QC 7 - 47                 |  |
|                                   |           |         |           | QC 7 - 48                 |  |
|                                   |           |         |           | QC 7 - 51                 |  |
|                                   |           |         |           | QC 7 - 58                 |  |
|                                   |           |         |           | QC 7 - 59                 |  |
|                                   |           |         |           | QC 7 - 60                 |  |
|                                   |           |         |           | QC 7 - 9                  |  |
|                                   |           |         |           | QC 7 - 68                 |  |
|                                   |           |         |           | QC 7 - 50                 |  |
|                                   |           |         |           | QC 7 - 67                 |  |
|                                   |           |         |           | QC 7 - 40                 |  |
|                                   |           |         |           | QC 7 - 24                 |  |
|                                   |           |         |           | QC 7 - 43                 |  |
| 180 Packaging 3-1 - Stock - B4B   | 10<br>pcs | 6/24/19 | 0.00 0.00 | Packaging 3 - 1 - B4B     |  |
|                                   |           |         |           | Packaging 3 - 2 - B4B     |  |
|                                   |           |         |           | Packaging 3 - 3 - B4B ✓   |  |
|                                   |           |         |           | Packaging 3 - 4 - B4B     |  |
|                                   |           |         |           | Packaging 3 - 5 - B4B     |  |
|                                   |           |         |           | Packaging 3 - 6 - B4B     |  |
|                                   |           |         |           | Packaging 3 - 7 - B4B     |  |
|                                   |           |         |           | Packaging 3 - 8 - B4B     |  |
|                                   |           |         |           | Packaging 3 - 9 - B4B     |  |

OCT 01 2019

DAS  
81  
9-89

OCT 02 2019

19  
Thu 10-2019-03  
Oscar



|                |           |         |           |                        |       |
|----------------|-----------|---------|-----------|------------------------|-------|
|                |           |         |           | Packaging 3 - 10 - B4B |       |
|                |           |         |           | Packaging 3 - 11 - B4B |       |
|                |           |         |           | Packaging 3 - 12 - B4B |       |
|                |           |         |           | Packaging 3 - 13 - B4B |       |
|                |           |         |           | Packaging 3 - 14 - B4B |       |
|                |           |         |           | Packaging 3 - 15 - B4B |       |
|                |           |         |           | Packaging 3 - 16 - B4B |       |
|                |           |         |           | Packaging 3 - 17 - B4B |       |
|                |           |         |           | Packaging 3 - 18 - B4B |       |
|                |           |         |           | Packaging 3 - 19 - B4B |       |
|                |           |         |           | Packaging 3 - 20 - B4B |       |
|                |           |         |           | Packaging 3 - 21 - B4B |       |
|                |           |         |           | Packaging 3 - 22 - B4B |       |
|                |           |         |           | Packaging 3 - 23 - B4B |       |
|                |           |         |           | Packaging 3 - 24 - B4B |       |
|                |           |         |           | Packaging 3 - 25 - B4B |       |
|                |           |         |           | Packaging 3 - 26 - B4B |       |
|                |           |         |           | Packaging 3 - 27 - B4B |       |
|                |           |         |           | Packaging 3 - 28 - B4B |       |
|                |           |         |           | Packaging 3 - 29 - B4B |       |
|                |           |         |           | Packaging 3 - 30 - B4B |       |
|                |           |         |           | Packaging 3 - 31 - B4B |       |
|                |           |         |           | Packaging 3 - 32 - B4B |       |
|                |           |         |           | Packaging 3 - 33 - B4B |       |
|                |           |         |           | Packaging 3 - 34 - B4B |       |
|                |           |         |           | Packaging 3 - 35 - B4B |       |
|                |           |         |           | Packaging 3 - 36 - B4B |       |
|                |           |         |           | QC 21 - SA - 21 ✓      | 87614 |
|                |           |         |           | QC 21 - SA - 70        | 045   |
|                |           |         |           | QC 21 - SA - 53        | 21    |
| 190 QC 21 - SA | 10<br>pcs | 6/24/19 | 0.00 0.00 |                        | 9-85  |

OCT 03 2019

Part Op 110 - QC2- Inspect parts off machine FAI/FAIB  
 Descriptions: 120 - QC8- Inspect parts - second check  
 130 - Small Fab  
 140 - Bend/Assemble as per dwg  
 150 - QC5- Inspect part completeness to step on W/O  
 160 - Chemical Conversion Coat per QSI005 4.1  
 170 - QC7-Inspect Chemical Conversion Coat  
 180 - Identify as per dwg & Stock Location: \_\_\_\_\_  
 190 - QC21- Final Inspection - Work Order Release

## Job BOM

| Part / Item  | Component Name     | Quantity           | Operation               | Container |
|--------------|--------------------|--------------------|-------------------------|-----------|
| M6061T6S.040 | 6061-T6 .040 Sheet | 2.4000 sf (.24 ea) | 100-Waterjet - Flow - 1 | 5204169   |

## Job Allocations

| Operation               | Component Part | Required | Inventory | Allocated |
|-------------------------|----------------|----------|-----------|-----------|
| 100-Waterjet - Flow - 1 | M6061T6S.040   | 2        | 320       | 0         |

## Part Specifications

Specifications could not be found.

Plex 6/12/19 4:13 PM Dart.Baltac.Lorin





Entered: 2K Date: Nov 18/19



NCR No. 19-7727 WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only ☐

|                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                                |                                                                                                                            |                                                                                                                                      |                                                                                                                         |                                                                    |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|
| <b>Job:</b> <u>196423</u>                                                                                                                                                                                                                                                                                                                                                 |  | <b>DISPOSITION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | <b>DEPARTMENT/PROCESS</b>                                                                                      |                                                                                                                            |                                                                                                                                      |                                                                                                                         |                                                                    |  |
| <b>Part No.</b> <u>D4434-9</u>                                                                                                                                                                                                                                                                                                                                            |  | Rework <input type="checkbox"/><br>Scrap <input checked="" type="checkbox"/><br>Use-as-is <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Skid-tube <input type="checkbox"/><br>Machining <input type="checkbox"/><br>Large Fab <input type="checkbox"/> | Cross tube <input type="checkbox"/><br>Small Fab <input checked="" type="checkbox"/><br>Finishing <input type="checkbox"/> | Eng. (Non-AW) <input type="checkbox"/><br>Prod. Eng. Coord. <input type="checkbox"/><br>Rec/Store/Packaging <input type="checkbox"/> | Engineering <input type="checkbox"/><br>Water Jet <input type="checkbox"/><br>Supplier Quality <input type="checkbox"/> |                                                                    |  |
| <b>Date :</b> <u>OCT 02 2019</u>                                                                                                                                                                                                                                                                                                                                          |  | <b>Sequence #:</b> <u>no</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | <b>QTY Affected :</b> <u>1570</u>                                                                              |                                                                                                                            |                                                                                                                                      | <b>MRB (QSI042)</b><br>DAS 9 9-89 <u>19-10-31</u>                                                                       |                                                                    |  |
| <b>Description Work Order Deviation</b>                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | <b>Disposition</b>                                                                                             |                                                                                                                            |                                                                                                                                      |                                                                                                                         | <b>Completed By</b><br>DAS 58 9-89                                 |  |
| <u>1 part was countersunk at the wrong place</u>                                                                                                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | <u>Scrap &amp; destroy<br/>no replace</u>                                                                      |                                                                                                                            |                                                                                                                                      |                                                                                                                         | <b>Lead hand / Supervisor</b><br>DAS 30 9-89<br><u>SEP 30 2019</u> |  |
|                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                                |                                                                                                                            |                                                                                                                                      |                                                                                                                         | <b>QC / QA Coordinator</b><br>DAS 9 9-89 <u>19-10-31</u>           |  |
|                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                                |                                                                                                                            |                                                                                                                                      |                                                                                                                         |                                                                    |  |
| <b>Root Cause</b>                                                                                                                                                                                                                                                                                                                                                         |  | <b>FAULT CATEGORY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                |                                                                                                                            |                                                                                                                                      |                                                                                                                         |                                                                    |  |
| Operator <input checked="" type="checkbox"/><br>Manufacturing Process <input type="checkbox"/><br>Equip/Tooling <input type="checkbox"/><br>Handling/Preservation <input type="checkbox"/><br>Material <input type="checkbox"/><br>Product Improvement <input type="checkbox"/><br>Process Improvement <input type="checkbox"/><br>Human Factors <input type="checkbox"/> |  | Pressure/Forced <input type="checkbox"/><br>Bending <input type="checkbox"/><br>Crushing <input type="checkbox"/><br>Cracks <input type="checkbox"/><br>Crimp/Kink/Ripple/Wave/Twist <input type="checkbox"/><br>Marks/Chatter <input type="checkbox"/><br>Mislabeled <input type="checkbox"/><br>Contamination <input type="checkbox"/><br>Misaligned/off center <input type="checkbox"/><br>BOM/Route <input type="checkbox"/><br>Broken/Damage/Defect <input type="checkbox"/><br>Incomplete/Unclear Instructions <input type="checkbox"/><br>Drill Holes <input type="checkbox"/><br>Fit/Function <input type="checkbox"/><br>Power Loss/Surge <input type="checkbox"/><br>Folio/Program <input type="checkbox"/><br>Grain Direction <input type="checkbox"/><br>Weld <input type="checkbox"/><br>Wrong Stock Pulled <input type="checkbox"/><br>Out of Sequence <input type="checkbox"/><br>Off-set/Set-up <input type="checkbox"/><br>Positioned Wrong <input type="checkbox"/><br>Outside Tolerance <input type="checkbox"/><br>Drawing <input type="checkbox"/><br>Finish <input type="checkbox"/><br>Part Lost/Missing <input type="checkbox"/><br>Misread <input type="checkbox"/> |  |                                                                                                                |                                                                                                                            |                                                                                                                                      |                                                                                                                         |                                                                    |  |
|                                                                                                                                                                                                                                                                                                                                                                           |  | <b>Other/Details:</b> <u>countersink wrong place</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                |                                                                                                                            |                                                                                                                                      |                                                                                                                         |                                                                    |  |